DOCUMENT RESUME

ED 147 348 TM 006 718

TITLE Suggested Guidelines for the Development and Implementation of a Continuous Uniform Evaluation System.
INSTITUTION Arizona State Dept. of Education, Phoenix.
PUB DATE [77]
NOTE 30p.

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS Academic Achievement; *Basic Skills; Criterion Referenced Tests; Elementary Secondary Education; *Guidelines; Individualized Instruction; Mathematics; Performance Based Education; *Program Development; Reading; School Districts; *State Programs; *Student Evaluation; Testing Programs; Writing
IDENTIFIERS *Arizona; Continuous Uniform Evaluation System

ABSTRACT

The Continuous Uniform Evaluation System (CUES) provides the means for Arizona school districts to demonstrate accountability for achieving the goal of assisting all public school students in Arizona to develop the basic skills of reading, writing, and computation. These suggested guidelines for the development and implementation of a continuous criterion-referenced evaluation system were developed in order to assist school districts in their efforts to comply with the CUES mandate while meeting the educational needs of their particular communities. This outline of the essential elements of the CUES system includes a discussion of the scope and sequence of instruction, performance objectives, the criterion-referenced approach to evaluation, the need for and nature of alternative learning plans, a record keeping system, and a parent reporting system. The roles of district and school administrators and instructional staff, and suggested steps for the development and implementation of the CUES are also listed. A guide to resources available through the Educational Information Center of the Arizona Department of Education is appended. (Author/MV)

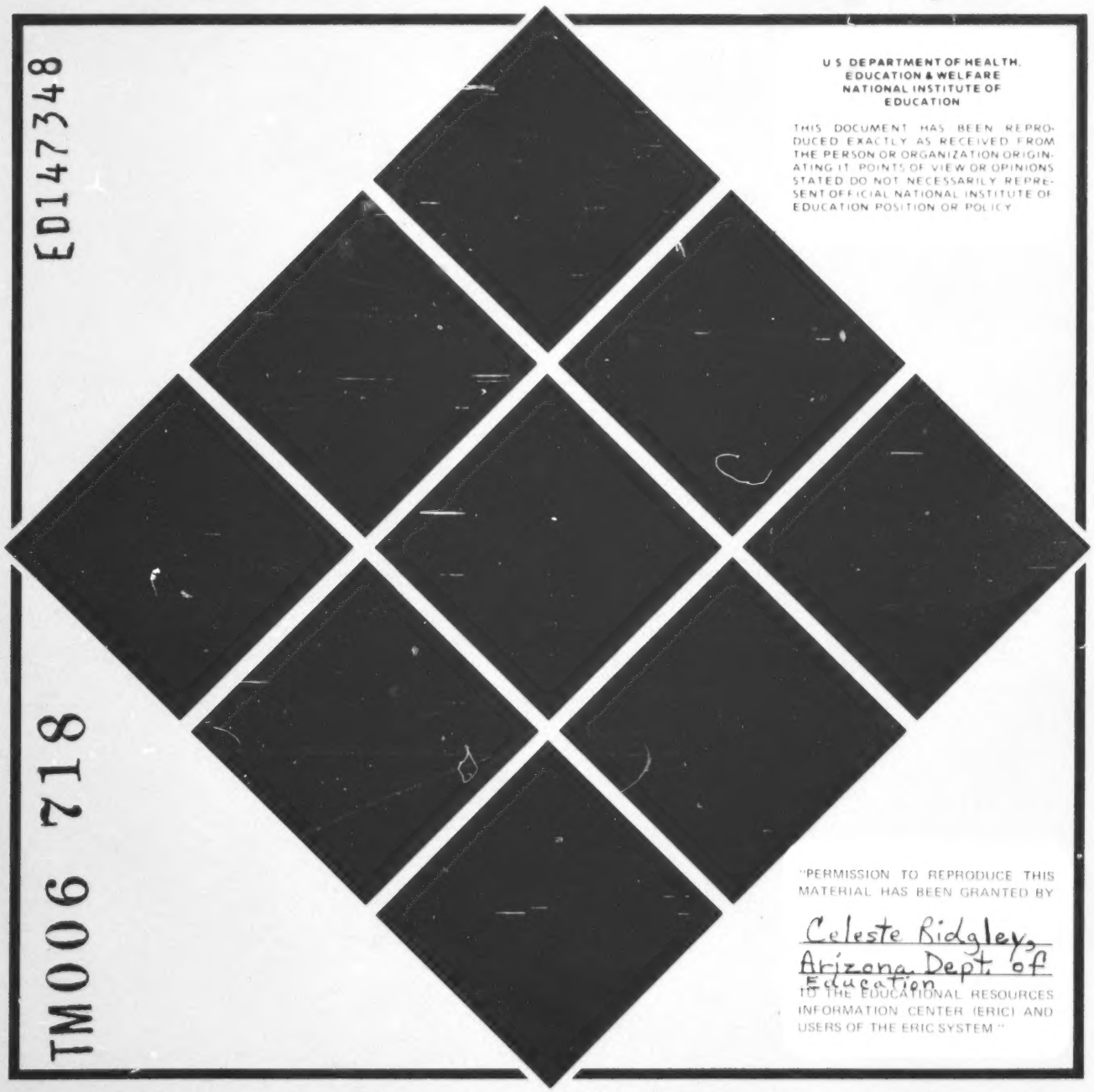
****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

Suggested Guidelines for the Development and Implementation of a Continuous Uniform Evaluation System

April 1977

ED147348

TM006 718



U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Celeste Ridgley, Arizona Dept. of Education

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

Carolyn Warner, Superintendent Arizona Department of Education

SUGGESTED GUIDELINES

FOR THE

DEVELOPMENT AND IMPLEMENTATION

OF A

CONTINUOUS UNIFORM EVALUATION SYSTEM

Arizona Department of Education
1535 West Jefferson
Phoenix, AZ 85007

Carolyn Warner, Superintendent

April 1977

ACKNOWLEDGMENT

The continuous uniform evaluation system provides the means for Arizona school districts to demonstrate accountability for achieving the important goal of assisting all public school students in Arizona to develop the basic skills of reading, writing, and computation. These suggested guidelines for the development and implementation of a continuous uniform evaluation system were developed in order to assist school districts in their efforts to comply with the CUES mandate (ARS 15-102.26) while meeting the educational needs of their particular communities.

The CUES task force is to be commended for the clarity and practicality of the guidelines that have been developed. We truly appreciate the time, effort, and expertise devoted to this task by the teachers and administrators on the CUES task force.

Carolyn Warner, Superintendent
Arizona Department of Education

TABLE OF CONTENTS

	Page
ARS 15-102.26 (CUES Mandate)	1
Why CUES?	2
A Guide to Basic Tasks and Essential Elements of a Continuous Uniform Evaluation System	3
Description of Essential Elements:	
Scope and Sequence	5
Performance Objectives	6
Evaluation	8
Alternative Learning Plan	10
Record-Keeping System	12
Parent-Reporting System	13
Typical Differentiated District Roles	14
Suggested Steps for the Development of a Continuous Uniform Evaluation Sytem	16
Suggested Steps for the Implementation of a Continuous Uniform Evaluation System	18
Appendix - Guide to Resources	21

ARS 15-102.26 - The State Board is directed to:

"By June 30, 1975, in cooperation with all local school districts, develop, establish, and direct the implementation of a continuous uniform evaluation system of pupil achievements in relation to measurable performance objectives in basic subjects. The board shall assist in the development of alternate learning procedures to help pupils attain their individual learning expectancy levels based on intelligence factors, achievement factors, and teacher evaluation. Basic subjects shall be defined for these purposes as reading, writing, and computation skills."

WHY CUES?

The Continuous Uniform Evaluation System (CUES) emphasizes what is "learned", rather than what is "taught." The use of a continuum of performance objectives and continuous criterion-referenced evaluation can eliminate unnecessary overlapping of teaching, as well as gaps in sequential learning. The emphasis on individual achievement of objectives is conducive to early detection of learning difficulties. Such a system facilitates individualized instruction by providing individualized student data for prescribing learning experiences. The alternative learning procedures insure that every feasible means is utilized to assist the student in accomplishing the objectives. The continuous K-12 record-keeping system helps prevent interruption in learning due to change in teachers, school, methods and materials, or manner of instruction. The parent-reporting system facilitates effective communication between school and home, focuses on learning rather than on failure, and gives parents information that they may use to assist in the education of their children.

CUES is success-oriented and provides a visible measure of progress to motivate student and teacher. CUES accommodates a variety of learning and teaching styles. It allows flexibility of method and materials without disorganization of content. CUES facilitates the improvement of instruction and can provide the basis for an effective overall program evaluation.

Frances Y. Anabisca
Frances Y. Anabisca, Ph.D.
Principal
Avondale Junior High School

Betty Atchinson
Betty Atchinson
Right to Read Director
Arizona Department of Education

Barbara I. Davis
Barbara I. Davis, Ph.D.
CUES Director
Arizona Department of Education

Barbara J. Furtaw
Barbara J. Furtaw
Teacher
Apache Junction Schools

Loretta B. Hall
Loretta B. Hall
Teacher
Trevor Browne High School
Phoenix, Arizona

Ira C. King
Ira C. King, Ed.D.
Evaluation Coordinator
Scottsdale Schools

Curtis A. Mecom
Curtis A. Mecom
Principal
Maricopa Elementary School

S. June Pallack
S. June Pallack
Instruction Specialist
Yuma Elementary Schools

Don Wagner
Don Wagner
Superintendent
Duncan Unified School District

A GUIDE TO BASIC TASKS AND ESSENTIAL ELEMENTS
OF A CONTINUOUS UNIFORM EVALUATION SYSTEM

1. Establish district goals in the areas of reading, writing, and computation.

2. Conduct in-service workshops to acquaint staff with the concept, legal requirements, and process of CUES and to encourage teacher input into the district plan for CUES.

3. Develop a scope and sequence, based on district goals, for each of the three basic areas: reading, writing, and computation. Encourage input from all teachers. If a small group does the actual writing, be sure that all teachers are kept informed of progress and are encouraged to ask questions and suggest revisions. Parent and student input should be considered where appropriate. Emphasize the need for a realistic scope and sequence based on the needs of your particular district. (Page 5)

4. Have task forces in each of the three areas coordinate the development and/or selection of appropriate performance objectives derived from the scope and sequence. If necessary, provide in-service training for teachers in the writing of performance objectives and in the development of a repertoire of methods and materials appropriate for individualized instruction. If necessary, provide outside consultant help in the development and/or selection of appropriate performance objectives. Encourage questions and suggestions from all teachers, even if a small group is doing the actual writing. (Pages 6-7)

5. Have task forces in each of the three areas coordinate the selection and/or development of appropriate test items, evaluation instruments and evaluation strategies derived from the performance objectives. If necessary, provide in-service training for teachers in testing and evaluation. If necessary, provide outside consultant help in the selection and/or development of test items, evaluation instruments and evaluation strategies. Encourage input from all teachers. Keep teachers informed of progress. (Pages 8-9)

6. Develop an alternative learning plan for the district. Decide what part of the plan will involve administrative decision-making and what part of the plan will involve teacher decision-making. (Pages 10-11)

7. Develop a record-keeping system that assures an accurate record of student achievement of objectives. Plan appropriate clerical support for teachers. Encourage teacher input. (Page 12)

8. Develop a parent-reporting system that will help parents to assist in the education of their child. Encourage parent and teacher involvement. Ask parents what method, format, and data would be most meaningful to them. (Page 13)

9. Have teachers develop and organize appropriate learning experiences derived from the performance objectives, including methods, materials, and classroom management. If necessary, provide in-service training for teachers in the development, organization, and implementation of appropriate learning experiences.

10. Finalize the system and field-test for one school year. Ask teachers and administrators (parents and students may also be included) to keep a list of problems and suggested solutions.

11. Evaluate the system and revise as necessary, based on compiled lists of problems and suggested solutions.

12. Evaluate CUES, revise as necessary, and update at least every five years.

DESCRIPTION OF ESSENTIAL ELEMENTS

SCOPE AND SEQUENCE

Scope and sequence is "a statement which presents the general concepts, knowledges, and skills which are to be taught in a particular subject area and the order for instruction."

The first step in the development of a district scope and sequence is the writing of statements of what is to be learned at each grade level, based on district goals, by a committee of teachers. A needs assessment is then conducted in the form of a review of these initial statements by a quality control committee made up of subject area teachers, administrators, and community representatives. After any necessary revisions, preliminary approval, and a second review by the quality control committee to make sure that the scope and sequence meets the needs of the district's students, the local Board of Education/Trustees signifies its approval and support of the nature and direction of the scope and sequence in general.

Input From Instructional Staff

The final document, the scope and sequence, is edited to remove ambiguities and assure effective communication. Examination copies of the scope and sequence are distributed to members of the instructional staff for their comments and suggested revisions. The scope and sequence is revised with due consideration for all input from interested teachers.

Board Adoption

The revised statements of scope and sequence are recommended to the Superintendent for Board adoption. Board adoption indicates approval of the contents of the statement and the Board's desire to see the material contained in the statement become the basic content of the appropriate course offering.

Implementation

Copies of the adopted scope and sequence are distributed to all instructional personnel. Instructional staff orientation is conducted to familiarize the appropriate staff members with the need for, and the nature of, the various statements of scope and sequence. The statements of scope and sequence are then implemented and form the basis for the development of specific measurable performance objectives in the areas of reading, writing, and computation.

Revision

Statements of scope and sequence which are developed and implemented are always subject to revision as omissions or redundancies become apparent, or as changing student needs require modification in the scope and sequence.

DESCRIPTION OF ESSENTIAL ELEMENTS

PERFORMANCE OBJECTIVES

Performance objectives tell <u>what the learner will be able to do</u> as the result of instruction, <u>under what conditions</u> he/she will be able to do it, and <u>to what extent</u> he/she will be able to do it.

Examples of Performance Objectives:

1. Given ten quotations from Shakespearean plays, — UNDER WHAT CONDITIONS

   the learner will identify in writing the character speaking and the title of the play from which the quotation is taken, — WHAT THE LEARNER WILL BE ABLE TO DO

   for at least eight of the ten quotations. — TO WHAT EXTENT

2. Given twenty word problems requiring single digit addition, — UNDER WHAT CONDITIONS

   the student will write the correct solution — WHAT THE LEARNER WILL BE ABLE TO DO

   for at least fifteen of the problems. — TO WHAT EXTENT

3. Given five fractions with different denominators, — UNDER WHAT CONDITIONS

   the student will find the common denominator — WHAT THE LEARNER WILL BE ABLE TO DO

   for all of the fractions. — TO WHAT EXTENT

Advantages of a Continuum of Performance Objectives

The use of a continuum of performance objectives to state expected learner outcomes has several advantages. It allows the teacher to pretest each student as an individual to determine individual learner needs in terms of the minimal required objectives for the present grade level and the preceding grade levels. Thus, it helps to eliminate gaps in student learning, because the teacher does not assume that the student was taught (or learned) something at a previous grade level or at a previously-attended school. Such an individualized approach to learning is essential in a highly mobile society such as ours. Also, there is no time wasted trying to "teach" students something they have already learned. Students can progress in learning at a pace that is comfortable for them, thus eliminating many discipline problems that have arisen in the past from the boredom of being held back to the "average" level of the class, or from the frustrations of being pushed ahead too fast beyond the ability of the learner to cope with new ideas.

Performance objectives do not, in any way, dictate learning style or teaching style. Professional expertise and professional judgment on the part of the teacher are essential in the choice of methods, techniques, materials, and environment suitable to the educational needs and learning style of each individual student. The use of a uniform continuum of performance objectives is in no way intended to limit what or how a teacher may teach. It is not intended to limit what or how a student may learn. It is intended to make sure that all students learn the essential skills to the greatest extent that their individual potential allows.

DESCRIPTION OF ESSENTIAL ELEMENTS

EVALUATION

The use of performance objectives provides a basis for evaluating student progress in terms of the needs and the abilities of the particular student. Criterion-referenced testing is the appropriate form of evaluation for use with performance objectives as it determines whether or not the student has achieved a particular objective, rather than yielding a comparative score as in norm-referenced testing such as the mandated standardized third grade reading test.

Criterion-Referenced Evaluation

Criterion-referenced evaluation measures whether or not the learner has achieved the objective. Criterion-referenced evaluation is used on a continuous basis. When the teacher and the student have determined subjectively that the student has learned a particular skill or group of skills, they use a criterion-referenced test to ascertain whether or not the student has indeed achieved the particular objective or group of objectives. If the student passes the test at the previously agreed upon level (demonstrates the ability to do what he/she is supposed to be able to do as a result of instruction received), then the student progresses to the next objective or group of objectives. If the criterion-referenced test shows that the student has not achieved the objective, then the teacher utilizes an alternative learning procedure or plan to further assist the student to achieve the objective.

Instead of a norm-referenced test given to all students at an arbitrarily arranged time and "covering" what was "taught" to all students rather than what was learned by each student, criterion-referenced testing is more appropriate with the use of performance objectives. However, the use of criterion-referenced evaluation does not preclude the use of norm-referenced evaluation, as long as each is used for the purpose for which it was designed.

Implications for Program Modification

The results of the criterion-referenced testing may also have implications for program modification. If most students fail to achieve a particular objective, a determination is made as to the appropriateness of the objective. If the objective is determined to be appropriate, then the instructional methods, techniques, materials, and environment are modified as necessary to facilitate the desired learning.

Although the focus of this approach to instruction is on learning rather than on teaching, it requires the highest degree of skill, professional knowledge, and flexibility on the part of the teacher. The teacher can use criterion-referenced evaluation as a tool to improve opportunities for student learning and to guarantee skill mastery to the greatest extent possible for the particular student, within the limitations of the

given circumstances. This type of evaluation is success-oriented and, therefore, conducive to high motivation for both teacher and student. The emphasis is on what the teacher and the student have succeeded in accomplishing, not on what they have failed to accomplish.

It is not necessary to evaluate student progress daily, or to test one student at a time. One day of the week can be set aside to test each student on the objective(s) that he/she supposedly has achieved during that week. This usually does not require a different test for each student, as many students are working on the same objectives at the same time. Another possible alternative is to assign tests for certain objectives to each day of the week, so the students can choose their test days according to the skills they feel ready to demonstrate. There are many testing arrangements possible with criterion-referenced evaluation and such decisions are left to the professional judgment of the teacher, with appropriate support from the administration.

Relationship Between Performance Objectives and Evaluation Measures

If the performance objective is carefully stated, it tells what the students will (be able to) do, to what extent they will be able to do it, and under what conditions they will be able to do it. Therefore, the performance objective itself suggests appropriate evaluation measures. For instance, the performance objective states that the learner, given ten written sentences with noun objects, will replace the noun objects with the correct object pronouns in at least eight of the ten sentences. The evaluation instrument obviously will consist of ten written sentences using noun objects with directions for the learner to replace the noun objects with the correct object pronouns.

If the performance objective does not require the student to write, a written test is not appropriate. Example:

Without looking at the written words,	UNDER WHAT CONDITIONS
the student will say the days of the week in Spanish	WHAT THE LEARNER WILL BE ABLE TO DO
with fewer than three errors in pronunciation.	TO WHAT EXTENT

It would be inappropriate to have the students write the days of the week to demonstrate achievement of this objective, as that would not test pronunciation, and they might be able to say the days of the week without being able to write them. The teacher would have the student say the days of the week aloud or record them on tape so the teacher could evaluate the student's performance at a more convenient time.

In a continuous uniform evaluation system, the results of evaluation are used to help the teacher prescribe further instruction for the student. Criterion-referenced evaluation based on performance objectives is objective, non-threatening, and useful. A student's record of accomplishments follows him/her from one grade level to the next. Ideally, this progress report also follows the student in transferring from one school to another.

DESCRIPTION OF ESSENTIAL ELEMENTS

ALTERNATIVE LEARNING PLAN

Alternative learning plans are an essential part of any education system that is success-oriented and has its focus on learning rather than on teaching. The teacher and the student identify the performance objective(s) that the student will attempt to achieve with the necessary instruction from the teacher. What happens if the student cannot demonstrate accomplishment of the objective after receiving the prescribed instruction (or after participating in the prescribed learning experiences)? The teacher utilizes an alternative learning plan; a different method or different materials to give the student another opportunity to learn. For instance, the student has attempted to learn to spell a list of words by filling in the blanks in a workbook and spelling the words aloud. The student has not learned to spell the words. The teacher then determines that the student needs additional practice and different stimuli, so the student is assigned to work with a spelling practice tape. The voice on the tape directs the student to listen to the voice say, spell, and repeat the word. Then the student is directed to write the word, spelling it aloud and listening while the voice on the tape says, spells, and repeats the word.

The teacher may have a personal collection of time-tested methods and/or materials, or the school or school district may provide a bank of suggested methods and materials coded to each performance objective on the continuum. If the teacher has utilized all available means of working with the student and the student still does not achieve the objective, then the teacher utilizes the alternative learning procedures available at the school level, such as a skills center or special resource program, or requests an administrative decision from the principal. The principal avails himself/herself of the expertise of the professional staff (counselor, school psychologist, etc.), and outside consultants if necessary, after obtaining parental permission, to determine if the student can reasonably be expected to achieve the objective or group of objectives within the classroom setting. If it is determined that the objective is not appropriate, the student is given whatever type of special services needed in addition to, or instead of, the regular classroom instruction. All decisions are made with input from teacher, student, and parent. If the student remains in the classroom, the teacher and the student again select objectives for the student's learning, attempting to choose objectives that are realistic for that particular student.

Beyond Minimal Objectives

If a student has achieved all objectives for the proper grade level, and three or four grade levels beyond that, the teacher develops with the student an individual learning plan more appropriate to the needs of that particular student. If there is a consultant or a teacher assigned to work with gifted students or with teachers of gifted students, the expertise of this resource person is utilized to help develop a learning plan for the student.

Instructional Program Review

If many students fail to achieve several of the minimal objectives for their grade level, the instructional methods, materials, techniques, and environment are reviewed to determine if any modifications are necessary. If the instructional setting and procedures are determined to be inadequate or inappropriate, necessary modifications are implemented. If the instructional setting and procedures are determined to be adequate, the continuum of objectives is adjusted to reflect reality. If most students achieve the minimal objectives for a particular grade level before entering that grade level, the continuum of objectives is adjusted to provide a more appropriate challenge for the students.

If a particular student is having great difficulty, generally, in performing in the classroom, his/her specific difficulty is diagnosed, and alternative learning procedures are implemented.

DESCRIPTION OF ESSENTIAL ELEMENTS

RECORD-KEEPING SYSTEM

A continuous uniform evaluation system includes a record-keeping system that provides: 1) an accurate record of student's achievement of objectives; 2) maintenance and updating of the record for as long as the student is in the system; 3) availability of the record from previous years to the student's present teacher; and 4) transference of the record when the student enrolls in a different school. The record keeping instructions and procedures should be as clear and simple as possible to avoid excessive time spent on this aspect of the instructional process. It is necessary for the teacher to know which objectives the student has achieved. Any additional information is included only as the need is perceived in a particular district. Some systems include the date or grade level at which the objective was achieved. The progress record itself provides instructions for marking the record, a place for the name of the student, a list of performance objectives, a place to indicate that (or when) the objectives were achieved, and an explanation of the system.

If the number of objectives is excessive, or the number of students in a class is too great, the record-keeping consumes too much of the teacher's time. These circumstances require the consideration of administrative alternatives: 1) to lower the class load; 2) to provide time for record-keeping during the teacher's day; 3) to provide clerical assistance for teachers; 4) to reduce the number of objectives; or 5) to simplify the system. Teachers, however, do allot a certain amount of instructional time for keeping records, as this is a necessary part of the instructional process.

DESCRIPTION OF ESSENTIAL ELEMENTS

PARENT-REPORTING SYSTEM

The parent-reporting system informs parents about their children's progress in school. The system may consist of a written report, a series of conferences, or any other means of communication that meets the need of parents to be informed about what their children are learning in school. The basic difference between the parent-reporting system in CUES and the traditional parent report is that the use of performance objectives makes it possible to report to the parent exactly what the student has learned, rather than how the student's performance compares with others on an arbitrary scale (A, B, C, 1, 2, 3). Since the teacher keeps an updated progress report for each student anyway, a copy of that could be used as the report to parents. A brief orientation session for parents at the beginning of the school year may be necessary to acquaint parents with the reporting system and to explain any technical language contained in the progress report. Additional information may be included in the report if needed, such as: an indication of which skills the student is currently working on in addition to those already mastered, recommendations and commendations, teacher comments, parent comments, and student comments.

The most effective parent-reporting system is one that has been developed in response to input from teachers and parents as to the method, frequency, purpose, format, and content that would be most meaningful to them, and one which encourages parents to assist in the formal education of their children.

TYPICAL DIFFERENTIATED DISTRICT ROLES

District Administrators

- Set district deadlines.
- Inform district personnel and parents of CUES mandate and district plan to meet the mandate.
- Provide leadership in establishing district goals.
- Develop district guidelines.
- Provide orientation to CUES for entire instructional staff.
- Coordinate development of district scope and sequence.
- Establish priorities to provide time and funds for development and implementation of CUES.
- Establish priorities to provide in-service training for administrators as needed.
- Establish priorities to provide for teacher in-service as needed.
- Coordinate efforts with other districts.
- Encourage K-12 cooperative planning.
- Develop alternative learning plan at district level.
- Coordinate preparation, duplication, and dissemination of printed materials.
- Identify resource persons and materials within district and outside of district.
- Inform instructional staff of available resources.
- Coordinate efforts with Arizona Department of Education.
- Report progress annually to Arizona Department of Education.
- Coordinate evaluation and revision of CUES.

School Administrators

- Set school deadlines.
- Provide instructional leadership.
- Participate in district goal-setting.
- Coordinate efforts with other schools.
- Participate in development of scope and sequence.
- Provide in-service training for teachers.
- Participate in in-service training for administrators.
- Recommend released time or funded extra time for instructional personnel as needed within district constraints.
- Organize personnel, environment, and materials to facilitate development and implementation of CUES.
- Develop alternative learning plan at school level.
- Facilitate communication and cooperative planning among teachers of all grade levels.
- Participate in evaluation and revision of CUES.
- Coordinate school efforts to develop and implement CUES.

Instructional Staff

- Participate in CUES orientation and in-service training.
- Participate in setting district goals.
- Participate in development of scope and sequence.
- Recommend necessary resources and time allocation for development and implementation of CUES.
- Develop classroom management skills.
- Develop effective classroom management procedures.
- Develop and/or select performance objectives.
- Plan instruction to result in student achievement of objectives.
- Develop and/or select evaluation instruments, strategies, etc.
- Develop system for continuous recording of student progress.
- Develop system for reporting student progress to parents.
- Develop alternative learning procedures at classroom level.
- Implement CUES in classroom.
- Evaluate CUES.
- Participate in revision of CUES.

SUGGESTED STEPS FOR THE DEVELOPMENT OF

A CONTINUOUS UNIFORM EVALUATION SYSTEM

1. Curriculum development committees are assigned to each of the three basic subjects: reading, writing, and computation. Each teacher on the committee represents a particular grade level or group of grade levels and other professional personnel. Each committee develops a tentative scope and sequence, based on district goals.

2. Each member of each committee meets with those teachers (etc.) whom he/she represents. They discuss the tentative scope and sequence and recommend any necessary modifications.

3. Each committee reconvenes and finalizes its scope and sequence.

4. Scope and sequence plans are disseminated to all district teachers and administrators.

5. Each committee develops a tentative continuum of performance objectives derived from the scope and sequence. Objectives are developed by committee members or adapted from CUES of other districts or from commercial materials. In any case, the committee selects only those objectives that meet the needs identified for their own district.

6. Each member of the committee consults with the teachers whom he/she represents and asks them to rate each objective according to the following scale:

    1. Essential to be included
    2. Desirable to be included
    3. Acceptable to be included
    4. Inappropriate to be included

7. Each committee reconvenes and rewrites the continuum of objectives using the rating input from the other teachers. Objectives rated 1 or 2 by every teacher are included. Objectives rated 1 or 2 by at least 50 percent of the teachers and 3 by the remaining teachers are included. Objectives not rated 1 or 2 by any teacher are excluded.

8. The remaining objectives, if any, are discussed at a meeting of the entire staff. Agreement is reached as to whether or not to include the remaining objectives. Also, agreement is reached on the place of the objectives in the continuum.

9. Each committee member writes or selects a given number of evaluation items for each objective. Each performance objective must be so specific, including the criterion statement ("to what extent"), that it says the same thing to everyone, before appropriate evaluation items can be written. The performance objective should indicate the nature and extent of the evaluation items to be written or selected.

10. Each committee member meets with the teachers he/she represents and asks them to rate, on the following scale, each evaluation item developed by the committee:

    1. Appropriate and adequate
    2. Appropriate, but not adequate
    3. Not appropriate

11. The committees reconvene, select evaluation items, and code the evaluation items to the appropriate objectives. Evaluation items rated 1 by at least 80 percent of the teachers are included. All other evaluation items are excluded. If an insufficient number of evaluation items results, steps 10 and 11 are repeated until a sufficient number of evaluation items is compiled to allow teachers to test at least three times for the same objective.

12. A copy of the continuum of performance objectives and corresponding evaluation items is disseminated to all administrators and teachers in the district. A copy of the scope and sequence and/or performance objectives may be sent to the PTA or other parent organization, especially if parents have served on the committees.

13. A committee is formed to develop a record-keeping system. The committee includes at least one representative from each group of persons for whose use the record is being kept (administrator, teacher, counselor, clerk, etc.).

14. Each member of the committee meets with the group he/she represents and asks them to list the categories of information they need to have included on the record, the preferred format, and any other specifications they think are a necessary consideration for the record-keeping system.

15. The committee reconvenes, considers the input from the various groups concerned with the record-keeping system, and designs a tentative record-keeping system.

16. The tentative system design is submitted to all district personnel for suggested revisions.

17. The committee reconvenes, considers the suggestions for revisions, and finalizes the record-keeping system.

18. A description of the record-keeping system and copies of any forms to be used are disseminated to all school personnel affected.

19. A committee of parents, teachers, and other concerned school personnel is formed to develop a parent-reporting system.

20. Each member of the committee surveys the group whose interests he/she represents as to preference of: 1) content, 2) method, 3) format, and 4) frequency of reporting.

21. The committee considers the input from the various groups concerned with the parent-reporting system, and designs a tentative parent-reporting system.

SUGGESTED STEPS FOR THE IMPLEMENTATION OF

A CONTINUOUS UNIFORM EVALUATION SYSTEM

1. Analyze continuum of objectives to determine resources needed to produce desired outcomes.

2. Plug in existing resources (personnel, facilities, equipment, supplies, etc.).

3. Budget for and acquire additional resources needed to produce desired outcomes.

4. Assess skills needed by instructional staff to produce desired outcomes.

5. Assess in-service needs to provide instructional staff with necessary skills.

6. Provide in-service to equip instructional staff with necessary skills.

7. Organize resources to facilitate desired outcomes.

8. Conduct orientation session for instructional staff to clarify all aspects of CUES, review purposes and process, clarify mutual expectations, and answer questions.

9. Have staff conduct similar orientation for parents and students.

10. Inform parents through mail and/or local media of the purposes of CUES and its anticipated benefits in terms of student learning.

11. Plan for adequate storage space wherever necessary.

12. Assign responsibility for coordination of CUES, including in-service for new personnel.

13. Provide every teacher with a copy of the district's performance objectives in reading, writing, and computation (K-12, if possible).

14. Provide every teacher with other information and materials as necessary.

15. Review with staff all forms to be used and all record-keeping requirements.

16. Inform teachers of support services available to help them meet the needs of students with special problems.

17. Develop procedures for placing individual student on continuum and monitoring progress, and familiarize staff with these procedures.

18. Implement continuous uniform evaluation system in all classes.

19. Provide for regular opportunities for teachers to evaluate: objectives, evaluation procedures, alternative learning plans, record-keeping system, and parent-reporting system.

20. Revise CUES as needed, based on recommendations resulting from regular evaluation meetings.

APPENDIX

GUIDE TO RESOURCES AVAILABLE
THROUGH THE EDUCATIONAL INFORMATION CENTER
OF THE ARIZONA DEPARTMENT OF EDUCATION

CUES Bibliography

Cherry Creek (Colorado School District
LANGUAGE ARTS GOALS AND OBJECTIVES. 1973

Colorado Springs (Colorado) Public Schools.
ALGEBRA I and II
ALGEBRA III and IV
JUNIOR HIGH MATH OBJECTIVES AND TEST ITEMS
GENERAL MATH OBJECTIVES AND TESTS, 1974

Florida Department of Education
USING PERFORMANCE OBJECTIVES. 1970

Delaware State Department of Education
READING AND WRITING OBJECTIVES
MATH OBJECTIVES 1975

Downers Grove (Illinoise) School District #99
PRIMARY, INTERMEDIATE AND HIGH SCHOOL LANGUAGE ARTS BEHAVIORAL OBJECTIVES AND TEST ITEMS
INTERMEDIATE, JUNIOR HIGH, AND HIGH SCHOOL BEHAVIORAL OBJECTIVES AND TEST ITEMS EVALUATION FOR INDIVIDUALIZING INSTRUCTION
PRIMARY MATHEMATICS BEHAVIORAL OBJECTIVES AND TEST ITEMS

Florida Department of Education.
THE FLORIDA CATALOG OF READING OBJECTIVES
SERIES 5 - READING SKILLS FOR GRADES K-12 - 1973

Howard County (Maryland) Public Schools
PERFORMANCE OBJECTIVES IN READING, MATH AND WRITING

Indiana University, Department of Psychology
PROGRAMMED MATH TUTORIAL (pmt)
DESCRIPTIVE LITERATURE AND SAMPLE OBJECTIVES K-2

Jefferson County (Colorado) Public Schools
MATHEMATICS, PRIMARY LEVEL
MATHEMATICS, INTERMEDIATE LEVEL

Kalamazoo (Michigan) Public Schools
ELEMENTARY PERFORMANCE OBJECTIVES IN THE AREA OF MATHEMATICS - 1973
(Includes criterion referenced tests K-1)

Los Angeles (California) City Schools.
SYSTEMS FORE -(reading, math and language arts objectives, their criterion referenced tests and pupil record sheets)

Massachusetts, University of. Center for Research and Evaluation.
READING K-6, 4-8
MATH K-3, 3-4, 4-6 and 9-12

CUES Bibliography

Missouri Department of Education
EDUCATIONAL OBJECTIVES FOR THE STATE OF MISSOURI AND PERFORMANCE INDICATORS FOR EDUCATIONAL OBJECTIVES FOR THE STATE OF MISSOURI, Grade 12

Montgomery County (Maryland).
READING, MATH, AND WRITING PERFORMANCE OBJECTIVES

New Haven (Connecticut) Public Schools
MATHEMATICS CURRICULUM K-4
MATHEMATICS CURRICULUM 5-8

Oklahoma Department of Education
ACCOUNTABILITY--THE OKLAHOMA PLAN (a handbook for objective writing and program development - 1974)

Oregon, State of
PROGRAM GOALS IN LANGUAGE ARTS AND MATH (contains program goals and subject matter taxonomies)

Philadelphia (Pennsylvania) School District
GUIDELINES TO THE USE OF CRITERION-REFERENCED READING TESTS

Riverside (California) Unified School District. Jefferson School.
CONTINUOUS READING PROGRAM (reading objectives with diagnostic tests)

Riverside (California) Unified School District. Longfellow School.
L.A.S.E.R. READING
L.A.S.E.R. MATH

San Bernardino (California) City Unified Schools.
OBJECTIVES FOR CURRICULUM (writing, math, reading - 1972)

San Diego (California) Public Schools
BANK OF COURSE OBJECTIVES (elementary)

South Dakota Department of Education
SIGN POSTS AND CHECK POINTS - MATHEMATICS UP TO ALGEBRA
SIGN POSTS AND CHECK POINTS - PART 2, ALGEBRA I, II, AND GEOMETRY AND TRIG.
SIGN POSTS AND CHECK POINTS FOR ELEMENTARY READING (performance criteria)

Springfield (Illinois) Public Schools
READING GUIDE
MATHEMATICS GUIDE AND RESOURCE BOOK

Washington County (Maryland)
STATE GOALS, SYSTEM GOALS AND SAMPLE BUILDING OBJECTIVES IN READING - 1974
WRITING: STATE GOALS, SYSTEMS GOALS, AND SAMPLE SCHOOL OBJECTIVES - 1974

ARIZONA DEPARTMENT OF EDUCATION
Library Media Services
1535 West Jefferson
Phoenix, Arizona 85007

Bibliography

The following companies' informational brochures regarding reading, writing, or math programs based on performance objectives are available for your perusal.

American Book Company. A Reading Continuum Stated in Instructional Objectives.

CCL Document. Individualized Math Objectives, K-8. Individualized math test items, primary and intermediate.

CTD/McGraw-Hill. Prescriptive Reading Inventory, examiners manual and interim tests.

Educational Progress. Individualized criterion referenced testing (diagnosis, presentation, instructional and testing continuum)

Evaluative Programs for Innovative Curriculums (EPIC). Criterion referenced tests in language arts and math, preschool - secondary.

Fountain Valley (CA) Reading Support System; Fountain Valley (CA) Math. Zweig Assoc. AZ Supplier - ZONAR Corp., Phoenix.

Ginn & Company. Individualized Math System, (IMS).

Houghton Mifflin. Individual Pupil Monitoring System and Cutomized Objective Monitoring System - Reading & Math.

Institute for Educational Research. Lanaguage Arts and Math Objectives (From Downers Grove (Illinois) Public Schools.

Instructional Objectives Exchange (IOX) Behavioral objectives samples in many subject areas.

NCS Interpretative Scoring System. Wisconsin Design for Reading Skill Development. Reading objectives, materials, and activities.

National Evaluation Systems. Comprehensive Achievement Monitoring (CAM). Performance objectives and criterion referenced test items.

New Century Educational Corporation. Individually Prescribed Instruction-Math (IPI).

Rand McNally. Developing Mathematical Processes (DMP)

Science Research Associates. SOBAR: A criterion referenced measurement program in reading and math.

Visual Materials Inc. (VMI). Language arts, reading, and math with behavioral objectives, (spirit masters).

Westinghouse. PLAN: An individualized learning program.

Westinghouse Learning Corporation, SCORE. Set of 13 booklets with behavioral objectives at the elementary and junior high levels in various subject areas. (On hand for your perusal)

ST24b/01-04

BIBLIOGRAPHY

Behavioral Objectives and Related Areas

BOOKS

Arizona Department of Education
READING PERFORMANCE OBJECTIVES: A MODEL. 1972. 23 pages

Some priority performance objectives in reading. Ninth grade equivalency. To assist school administrators and teachers as they develop reading performance objectives for their own schools.

Boston, Robert E.
HOW TO USE PERFORMANCE OBJECTIVES TO INDIVIDUALIZE INSTRUCTION. Educational Technology. 1962.

Dillman, Caroline M.
WRITING INSTRUCTIONAL OBJECTIVES. Fearon. 1972. 120 pages.

Background reading, point by point outline for writing objectives. Table of verbs to use and verbs to avoid. Contains bibliography.

Drumheller, Sidney J.
HANDBOOK OF CURRICULUM DESIGN FOR INDIVIDUALIZED INSTRUCTION: A SYSTEMS APPROACH. How to develop curriculum materials from rigorously defined behavioral objectives. Educational Technology Publications. 1971. 103 pages.

This book develops a model to alleviate the problems faced by the teacher working with individualized programs of instruction. Contains fold-outs of L) Bloom's Taxonomy of Educational Objectives, Congnitive Domain, 2) Illustrated model of modified taxonomy structure, 3) Drumheller's design model, and 4) Portfolio of objectives.

Kibler, Robert J.
BEHAVIORAL OBJECTIVES AND INSTRUCTION. Allyn and Bacon, Inc. 1970. 196 pages.

Provide information about the nature and characteristics of behavioral objectives from a variety of sources. Gives very basic help in writing objectives. The psychomotor domain is included. Appendix: sample behavioral objectives to serve as models.

McAshan, H. H.
WRITING BEHAVIORAL OBJECTIVES. Harper and Row. 1970. 116 pages.

Basic information on the components of behavioral objectives and how to develop goal statements. Gives sample evaluation statements. Includes annotated bibliography.

Timiraos, Carmen R.
BEHAVIORAL OBJECTIVES MANUAL. Southwest Cooperative Educational Laboratory. 1970. 52 pages.

A series of lessons on how to state goals and write objectives. Includes bibliography.